Appl. No. 09/673,981

Amdt. Dated November 12, 2003

Reply to Office Action of July 11, 2003

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A reel-up/winder, comprising one or several members

(11,12;30...34) that support the reel/roll (10) to be formed onto a reel/roll spool (16), of which

members at least one support member is a set of belt rolls (12:30...34), which consists of a belt loop

(15,34) which is supported by means of at least two rolls (13,14,30,31), whose axes are substantially

parallel to the axis of the reel/roll spool (16), wherein into the outer face of the mantle of at least one

roll (13,14,30,31) being in nip contact with the reel/roll (10) to be formed in said set of belt rolls

(12,30...34), a substantially spiral-shaped groove pattern (204) has been formed between the multiple

deep guide grooves (203) and which extends across the axial width (1) of the roll mantle (202).

2. (Previously Presented) A reel-up/winder as claimed in claim 1wherein it comprises a first

winding drum (11) and a second windingdrum arrangement (12), which consists of a first belt roll

(13), of a second belt roll (14), and of adjacent endless belts (15) fitted around said belt rolls, the web

(W) running through a first nip (NP₁) formed between the first winding drum (11) and the paper roll

(10) and through a second nip (NP₂) formed between the second winding drum arrangement (12) and

the paper roll (10) and being wound onto a roll spool (16), whereas into the outer face of the roll

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mantle (202) of the first belt roll (13) being in nip contact with the paper roll (10) to be formed in the

second winding drum arrangement (12), a substantially spiral-shaped groove (204) has been formed,

which extends across the axial width (1) of the roll mantle (202).

3. (Previously Presented) A reel-up/winder as claimed in claim 1 wherein it comprises a reel-

cylinder (30), along with whose circumference the web (W)runs before it is transferred, through a

nip (N) formed by the reel cylinder (30) and a reel spool (16) resting on support rails (35), onto

the circumference of the reel (10) that is formed around the reel spool (16), and which reel-up further

comprises an endless belt (34), which runs as guided by guide rolls (31...33) and through the nip (N)

between the reel cylinder (30) and the reel (10), and which belt (34) supports the web (W) when the

web arrives in the reel-up and until the web (W) is reeled around the reel (10) that is formed onto the

reel spool (16), whereas into the outer face (202) of the mantle of the reel cylinder (30) being in nip

contact with the paper roll (10); asubstantially spiral-shaped groove (204) has been formed, which

extends across the axial width (1) of the mantle (202) of the reel cylinder (20).

4. (Previously Presented) A reel-up/winder as claimed in claim 1 wherein a depth (h) of said

groove (204) is, at its deepest point, about 0.3 mm to about 1.5 mm.

5. (Previously Presented) A reel-up/winder as claimed in claim 1 wherein a width (d) of said

groove (204) is about 20 mm to about 150 mm.

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6. (Currently Amended) A reel up/winder comprising:

a reel spool for forming a roll, said reel spool having an axis;

a support assembly comprising at least a first roll, at least a second roll and a belt arranged

around said at least a first roll and said at least a second rollwherein said at least first roll and said

at least second roll each have an axis substantially parallel to said axis of saideel and wherein one

of said at least a first roll and said at least a second roll has a substantially spiral shaped groove

pattern formed on an outersurface of said roll between the multiple deep guide grooves (203), and,

said groove pattern extending along an axial width of said roll.

7. (Previously Presented) The reel up/winder according to claim 6, further comprising a first

winding drum and wherein said first winding drum is arranged such that said paper web runs through

a first nip defined by said first windingdrum and said reel and then through a second nip defined by

said at least first roll of said support assembly.

8. (Previously Presented) The reel up/winder according to claim 6, further comprising a reel

cylinder arranged before said reel spool in a direction of travel of said web.

9. (Previously Presented) The reel up/winder according to claim 6, wherein a depth of said

groove is about .3 to about 1.5 mm.

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10. (Previously Presented) The reel up/winder according to claim 9, wherein the depth of

said groove of said groove is about .3 to about 1.0 mm.

11. (Previously Presented) The reel up/winder according to claim 6, wherein a width of said

groove is about 20 to about 150 mm.

12. (Previously Presented) The reel up/winder according to claim 11, wherein the width of

said groove is about 35 to about 100mm.

13. (Previously Presented) A reel up/winder comprising:

a reel spool for forming a roll, said reel spool having an axis;

a reel cylinder arranged before said reel spool in a direction of travel of a web;

a endless belt arranged around a plurality of guide rolls and said reel cylinder, said endless belt

structured and arranged to guide said web through a nip defined between said reel cylinder and said

reel spool;

wherein an outer face of a mantle of said reel cylinder has a substantially spiral shaped groove

formed therein, between the multiple deep guide grooves (203), and, said groove extending across an

axial width of said reel cylinder.

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- 14. (Previously Presented) A reel-up/winder as claimed in claim 4, wherein the depth (h) of said groove (204) is, at its deepest point is about 0.3 mm to about 1.0 mm.
- 15. (Previously Presented) A reel-up/winder as claimed in claim 5, wherein the width (d) of said groove (204) is about 35 mm to about 100 mm.
- 16. (Previously Presented) The reel up/winder according to claim 13, wherein a depth of said groove is about 1.5 mm.
- 17. (Previously Presented) The reel up/winder according to claim 16, wherein the depth of said groove of said groove is about 1.0 mm.
- 18. (Previously Presented) The reel up/winder according to claim 13, wherein a width of said groove is about 20 to about 150 mm.
- 19. (Previously Presented) The reel up/winder according to claim 18, wherein the width of said groove is about 35 to about 100mm.